

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**TENTATIVE CEASE AND DESIST ORDER**

**REQUIRING THE CITY OF SUNNYVALE  
WASTEWATER TREATMENT PLANT  
TO CEASE AND DESIST DISCHARGING PARTIALLY-TREATED WASTEWATER  
TO WATERS OF THE STATE**

**WHEREAS** the California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter “Regional Water Board”), finds that:

1. The City of Sunnyvale (hereinafter “Discharger”) owns and operates a wastewater treatment plant located at 1444 Borregas Avenue, Sunnyvale, Santa Clara County, California. The plant treats wastewater from domestic, commercial, and industrial sources from the City of Sunnyvale, Rancho Rinconada, and Moffett Field. It has a dry weather design capacity of 29.5 million gallons per day.
2. The wastewater discharge has been regulated by waste discharge requirements in Order No. R2-2003-0079 (NPDES Permit No. CA0037621).
3. Concurrent with the adoption of this Cease and Desist Order, the Regional Water Board is adopting Order No. R2-2009-XXXX (hereinafter “Permit”), reissuing waste discharge requirements. The Permit contains prohibitions, limitations, and provisions regulating the discharge. The Permit establishes effluent limits for toxic pollutants in Section IV.B.1 that include the total ammonia effluent limits listed in Table 1.

**Table 1: Effluent Limitations for Total Ammonia**

Season	Effluent Limits		Monitoring Station
	Average Monthly (mg/L)	Maximum Daily (mg/L)	
June – September	2.0	5.0	EFF-001
October – May	4.5	18	EFF-001

4. The feasibility of the Discharger complying with the ammonia effluent limits in Table 1 was evaluated on a seasonal basis by statistically evaluating total ammonia effluent data collected from February 2005 through January 2008. The Regional Water Board concludes that, although the Discharger is able to comply with the Permit limits during the dry season (June through September), it cannot immediately comply with the total ammonia effluent limits for the wet season (October through May). During the wet season, the 95<sup>th</sup> percentile of the observed data (8.4 mg/L) is greater than the average monthly effluent limit (4.5 mg/L). Had the Permit’s total ammonia limits been effective from February 2005 through January 2008,

the Discharger would have violated the average monthly effluent limit seven times (roughly twice per year).

5. Water Code § 13301 authorizes the Regional Water Board to issue a Cease and Desist Order when it finds that a waste discharge is taking place, or threatening to take place, in violation of Regional Water Board requirements.
6. Because the Discharger will violate, or threatens to violate, required effluent limitations, this Cease and Desist Order is necessary to ensure that the Discharger achieves compliance. This Order establishes a time schedule for the Discharger to complete necessary investigative and corrective actions to address imminent and threatened violations of the wet season total ammonia effluent limitations.
7. The time schedule in this Order is intended to be as short as possible. Nevertheless, it accounts for considerable uncertainty in determining the effective measures (e.g., treatment plant operational adjustments and physical upgrades) necessary to achieve compliance. This Order allows time to first perform studies to verify that the Permit's ammonia limits are adequately protective before requiring costly treatment upgrades. The studies are required to evaluate in greater detail the concentrations of total ammonia and un-ionized ammonia in the effluent and receiving waters, the variability in discharge mixing and dilution in the receiving waters, and any more-stringent ammonia criteria that may become effective in the foreseeable future. The time schedule is based on reasonably expected times needed to complete the following tasks:
  - plan and implement additional studies and evaluate the resulting data;
  - identify treatment alternatives, if necessary;
  - test and select from among available alternatives; and
  - construct plant upgrades, as necessary.

The Regional Water Board may revisit these assumptions as more information becomes available.

8. This Order is exempt from the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code § 21000 et seq.) because it is an order enforcing existing requirements set forth in the Permit, the adoption of which was exempt from CEQA pursuant to California Water Code section 13389. Moreover, in accordance with 14 CCR § 15321, as an enforcement action it is exempt from CEQA.
9. The Regional Water Board has notified the Discharger and interested persons of its intent to consider adoption of this Cease and Desist Order and has provided an opportunity to submit written comments and appear at a public hearing. The Regional Water Board, in a public hearing, has heard and considered all comments.

**Table 2: Time Schedule and Prescribed Actions**

Actions	Deadline
a. Submit a <u>study plan</u> that includes the following elements: <ul style="list-style-type: none"> <li>• sampling locations (effluent and, at minimum intervals of 200, 500, 1000, and 2000 feet from the outfall, locations upstream and downstream of the confluence of Moffett Channel and Guadalupe Slough),</li> <li>• sampling and analysis protocols (including means to evaluate diurnal conditions, such as some continuous monitoring),</li> <li>• sampling parameters (at a minimum, pH, salinity, temperature, hardness, and total ammonia),</li> <li>• data interpretation models and other methods to be used (representing conservative, reasonable worst case conditions), and</li> <li>• implementation schedule.</li> </ul>	August 3, 2009
b. Begin implementation of the study plan developed for action “a.”	September 21, 2009
c. Submit annual <u>status reports</u> that contain, at minimum, monitoring data collected during the previous year and necessary updates to the study plan.	Annually, on January 30, with the Annual Report required by Permit Attachment E
d. Submit a <u>study report</u> that includes the following elements: <ul style="list-style-type: none"> <li>• sampling results, data interpretation, and conclusions;</li> <li>• proposed mixing zone (consistent with <i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i> § 1.4.2.2) and dilution credit, if any;</li> <li>• total ammonia effluent concentration goals that account for Basin Plan un-ionized ammonia objectives (translated into total ammonia criteria), dilution (if justified), and USEPA’s <i>1999 Update of Ambient Water Quality Criteria for Ammonia</i> (EPA-822-R-99-014).</li> </ul>	June 30, 2011
e. Submit a summary of options capable of achieving compliance with Permit limits, with a discussion of the pros and cons of each, and including the results of bench scale testing or pilot scale testing or both.	June 30, 2013
f. Submit a <u>compliance plan</u> that includes the following elements: <ul style="list-style-type: none"> <li>• measures the Discharger will take to comply with the Permit limits, including the following, as relevant:               <ol style="list-style-type: none"> <li>i. development of preliminary design specifications,</li> <li>ii. development of final design specifications,</li> <li>iii. procurement of funding,</li> <li>iv. acquisition of necessary permits and approvals, and</li> <li>v. construction; and</li> </ol> </li> <li>• implementation schedule for the above measures.</li> </ul>	September 30, 2013
g. Begin implementation of the compliance plan developed for action “f.”	November 18, 2013
h. Submit annual <u>status reports</u> .	Annually, on January 30, with the Annual Report required by Permit Attachment E
i. Submit <u>compliance documentation</u> confirming complete implementation of action “g” and compliance with effluent limitations in Section V.B.1 of the Permit for ammonia.	December 31, 2018

**IT IS HEREBY ORDERED**, in accordance with Water Code § 13301, that the Discharger shall cease and desist from discharging and threatening to discharge wastes in violation of the Permit by complying with the following provisions.

1. Prescribed Actions. The Discharger shall complete the actions listed in Table 2 in accordance with the time schedule provided therein to comply with all effluent limitations in the Permit. Deliverables listed in Table 2 shall be acceptable to the Executive Officer, who will review them for adequacy and compliance with Table 2 requirements. The Discharger shall implement all actions set forth in each deliverable, unless the Executive Officer finds the deliverable to be unacceptable.
2. Reporting Delays. If the Discharger is delayed, interrupted, or prevented from meeting one or more of the actions described in Table 2 due to circumstances beyond its reasonable control, the Discharger shall promptly notify the Executive Officer, provide the reasons and justification for the delay, and propose a time schedule for resolving the delay.
3. Effective Date. This Order shall be effective on the effective date of the Permit.

I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on March 11, 2009.

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BRUCE H. WOLFE  
Executive Officer